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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/724,281	11/28/2003	Shinichiro Hashimoto	82478-2800	1152
21611	7590	08/01/2006	EXAMINER	
SNELL & WILMER LLP 600 ANTON BOULEVARD SUITE 1400 COSTA MESA, CA 92626			ALEMU, EPHREM	
			ART UNIT	PAPER NUMBER
			2821	

DATE MAILED: 08/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/724,281	<b>Applicant(s)</b> HASHIMOTO ET AL.	
	<b>Examiner</b> Ephrem Alemu	<b>Art Unit</b> 2821	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) ☒ Responsive to communication(s) filed on 17 August 2005.

2a) ☒ This action is **FINAL**.                      2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) ☒ Claim(s) 1-33,36-70 and 73-79 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.

6) ☒ Claim(s) 1-33,36-70 and 73-79 is/are rejected.

7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.

8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) <input type="checkbox"/> Notice of References Cited (PTO-892) 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 6) <input type="checkbox"/> Other: _____
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## DETAILED ACTION

### *Claim Objections*

1. Claims 37 objected to because of the following informalities:

In claims 2, 3, 4, 5, 6, 8, 9, 11, 12, 14, 15, 16, 18, 22, 23, 24, line 1, respectively, delete “panel” to be consistent with the independent claims.

In claims 13, 17 and 21, line 1, respectively, “the voltage waveform” lack antecedent basis.

In claim 37, line 3, insert --electrodes-- after “first and second “ to clearly identify that the “first and second” are electrodes.

In claim 40, replace “first a substrate” with --a first substrate-- to correct minor typographical error. Appropriate correction is required.

In claims 76, 78, 79, lines 7, respectively, the “first and second electrode”, should be replaced with --first and second electrodes--.

Applicant cooperation is requested to correct further minor informalities that arises within the claims.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: the applied voltage should be having predetermined duration or such as applying “a first voltage of predetermined duration to the third electrode and a second voltage of predetermined duration to the first and second electrodes”. And is the voltage applied

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to the first electrode and second electrode the same or different. In addition is the voltage being applied to the first electrode and the second electrode is the same or different?

4. Claims 43 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re claims 1, 25, 39, 40, 41, 42 and 40, is the voltage of predetermined duration applied to the first second and third electrode the same or different voltages of predetermined potential.

In claim 33, a voltage to the third electrode and a voltage to the first and second electrode so as to generate a sustain discharge between the first and second electrodes in the sustain period is indefinite since the voltage being applied to the electrodes is not specified as being waveform with a predetermined duration. Therefore, a sustain discharge as claimed cannot be generated.

In claim 43, line 4, “a drive unit that drives the panel unit using the steps of the method is indefinite since the steps of the method has not been defined.

In claim 43, lines 5-8, the recitation “applying a write voltage and a sustain voltage of predetermined duration to the first and second electrodes; and changing potential of the voltage applied to the third electrode during duration of the voltage applied to the first electrode” is indefinite. It is not clear how or when “the write voltage and the sustain voltage of predetermined duration” is applied to the first and second electrodes; and what voltage potential applied to the third electrode is changed since “the voltage applied to the third of electrode” lack antecedent basis.

In claim 49, lines 5-8, the recitation “applying a write voltage and a sustain voltage of predetermined duration to the first and second electrodes; and changing potential of the voltage

applied to the third electrode during duration of the voltage applied to the first electrode” is indefinite. It is not clear how or when “the write voltage and the sustain voltage of predetermined duration” is applied to the first and second electrodes; and what voltage potential applied to the third electrode is changed since “the voltage applied to the third of electrode” lack antecedent basis.

In claim 65, lines 6-8, the recitation “applying a write voltage and a sustain voltage of predetermined duration to the first and second electrodes; and during the sustain discharge, changing potential of the voltage applied to the third electrode during duration of the voltage applied to the first electrode” is indefinite. It is not clear how or when “the write voltage and the sustain voltage” is applied to the first and second electrodes; and what voltage potential applied to the third electrode is changed since “the voltage applied to the third of electrode” lack antecedent basis. Is the “within duration of the voltage applied to the first electrode” referring to the write voltage or sustain voltage or both?

In claim 70, applying a voltage to the third electrode and a voltage to the first and second electrode, so as to generate a sustain discharge between the first and second electrodes is indefinite since the voltage being applied to the electrodes is not specified as being waveform with a predetermined duration. Therefore, a sustain discharge as claimed cannot be generated. Further, is the potential of the third electrode being changed during the write period or sustain period based on the detected brightness average and temperature?

In claims 76-79, respectively, is applying a voltage to the third electrode and a voltage to the first and second electrode, so as to generate a sustain discharge between the first and second electrodes; and changing potential of the voltage applied third electrode during the duration of

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the voltage applied to the first electrode is indefinite since the voltage being applied to the third electrode has not been specified as being waveform with a predetermined duration. And when or what period is the change of potential applied to the third electrode?

Claims 2-6, 8-24, 26-32, 36-38, 44-48, 50-64, 66-69, 73-75 are rejected as being dependent over rejected claims 1, 7, 25, 33, 43, 49, 65 and 70.

### ***Response to Arguments***

5. Applicant's arguments, see pages 22-25, filed 4/18/2006, with respect to claims 1-6, 8-10, 13-16, 25-33, 36-48, 50, 53-56, 65-70 and 73-79 have been fully considered and are persuasive. The rejection of 1-6, 8-10, 13-16, 25-33, 36-48, 50, 53-56, 65-70 and 73-79 have been withdrawn.

### ***Remarks***

6. Regarding claims 1-33, 36-70 and 73-79, the merits of indication of allowable subject matter or applied prior art will not be provided in this office action based on the 112 second paragraph as indicated above in paragraphs 3 and 4

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ephrem Alemu whose telephone number is (571) 272-1818. The examiner can normally be reached on M-F Flex hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P Callahan can be reached on (571) 272-1740. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EA  
7-12-06



**TUYET VO**  
**PRIMARY EXAMINER**